APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/736,452	12/14/2003	Stanislav M. Bobrovskiy	109905-130792	3079

60380 7590 03/22/2007 STEVEN C. STEWART REALNETWORKS, INC. 2601 ELLIOTT AVENUE, SUITE 1000 SEATTLE, WA 98121	**EXAMINER** LU, KUEN S
	ART UNIT · **PAPER NUMBER** 2167

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/22/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *17 October 2006*.

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-24* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-24* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☐ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

DETAILED ACTION

1. The Action is responsive to Applicant's Amendment filed October 17, 2006.

Applicant's amendment made to claims 1 and 13 is acknowledged and Examiner's

rejections to claims 1-11 and 13-24 under 35 U.S.C. § 101 and to claims 1 -24 under 35

U.S.C. § 112 are hereby withdrawn, as necessitated by the amendment.

2. As to Applicant's Arguments/Remarks filed October 17, 2006, please see Examiner's

response in "***Response to Arguments***", following this Office Action for Final Rejection

(hereafter "the Action"), shown next. Please note, in the Action, the Examiner maintains

the same grounds of rejections as set forth in the non-final rejections of July 17, 2006,

and please further note claims 1-24 in the application are pending.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

3.1. Claims 1-11 and 12-23 are rejected under 35 U.S.C. 103(a) as being unpatentable

over by Plourde, JR. et al. (U.S. Patent Application 2003/0110504, hereafter "Plourde")

in view of Korst (U.S. Patent 6,205,525).

As per claim 1, Plourde teaches "A method of storing streamed presentation data

within a container file" (See Page 10, [0088] where FAT file contains information about

media content instance files);

"receiving one or more data streams from each of one or more presentation sources

within a presentation" (See Page 7, [0067]-[0069] where media contents are received

from providers via network interface and received contents are processed and stored on

storage device);

"creating within the container file, a virtual file for each of the one or more presentation

sources" (See Fig. 3C and Page 10, [0088] where FAT file entry describes information

about media content instance files, such as physical locations); and

"temporarily storing first data associated with a first data stream of a first presentation

source in association with a first virtual file corresponding to the presentation source"

(See Page 11, [0089] where clusters for temporarily buffered media content instance

files are stored in time shift buffer space).

Plourde does not explicitly teach "determining a container file size", although Plourde

teaches setting a buffer size capacity and tracking disk space usage used for the time

shift buffer at Page 12, [0097].

However, Korst teaches "determining a container file size of the container file" (See

col. 7, lines 17-23 where the scheduler of a data streams supplying system determines

how many active streams and calculates the size of data block to be read in the

following sweeping operation).

It would have been obvious to one having ordinary skill in the art at the time of the

applicant's invention was made to combine the teaching of Korst with Plourde reference

by tracking duration of time shift buffer and calculating buffering rate to determine the

buffer capacity size because both references are directed to media content delivery and

the combined teaching of the references would have made Plourde's buffering

mechanisms for video recording and delivery more efficient due to more accurately

calculated and determined buffer size.

The combined teaching of the Korst and Plourde references further teaches the

following: "temporarily storing additional data from the first data stream in place of at

least a portion of the first data if the container file size is within a predetermined range of

an identified maximum buffer size" (See Plourde: Page 11, [0090] where media content

stored in the clusters of time shift buffer is overwritten); and

"rendering at least one of said one or more data structure" (See Korst: col. 7, lines 17-

23 where the scheduler of a data streams supplying system determines how many

active streams and calculates the size of data block to be read).

As per claim 13, Plourde teaches "A machine readable storage medium having

stored thereon machine executable instructions, which when executed operate to

implement the method" (See Fig. 3A and Page 7, [0069] where processor, storage,

memory and applications are implemented to perform media contents receiving and

processing) comprising:

"receiving one or more data streams from each of one or more presentation

sources within a presentation" (See Page 7, [0067]-[0069] where media contents are

received from providers via network interface and received contents are processed and

stored on storage device);

"creating within a container file, a virtual file for each of the one or more presentation

sources" (See Fig. 3C and Page 10, [0088] where FAT file entry describes information

about media content instance files, such as physical locations); and

"temporarily storing first data associated with a first data stream of a first presentation

source in association with a first virtual file corresponding to the presentation

source" (See Page 11, [0089] where clusters for temporarily buffered media content

instance files are stored in time shift buffer space).

Plourde does not explicitly teach "determining a container file size", although Plourde

teaches setting a buffer size capacity and tracking disk space usage used for the time

shift buffer at Page 12, [0097].

However, Korst teaches "determining a container file size of the container file" (See

col. 7, lines 17-23 where the scheduler of a data streams supplying system determines

how many active streams and calculates the size of data block to be read in the

following sweeping operation).

It would have been obvious to one having ordinary skill in the art at the time of the

applicant's invention was made to combine the teaching of Korst with Plourde reference

by tracking duration of time shift buffer and calculating buffering rate to determine the buffer capacity size because both references are directed to media content delivery and the combined teaching of the references would have made Plourde's buffering mechanisms for video recording and delivery more efficient due to more accurately calculated and determined buffer size.

The combined teaching of the Korst and Plourde references further teaches the following:

"temporarily storing additional data from the first data stream in place of at least a portion of the first data if the container file size is within a predetermined range of an identified maximum buffer size" (See Plourde: Page 11, [0090] where media content stored in the clusters of time shift buffer is overwritten) and

"rendering at least one of said one or more data structure" (See Korst: col. 7, lines 17-23 where the scheduler of a data streams supplying system determines how many active streams and calculates the size of data block to be read).

As per claims 2 and 14, the combined teaching of the Korst and Plourde references further teaches "the additional data from the first data stream is stored in place of at least a portion of the first data if the container file size is equal to or exceeds the identified maximum buffer size" (See Plourde: Page 11, [0090] where the media content stored in the clusters of time shift buffer is overwritten and deleted, note buffering algorithms are applied when incoming data stream size is greater than that of free space).

As per claims 3 and 15 the combined teaching of the Korst and Plourde references

further teaches the following:

"temporarily storing second data associated with a second data stream of the first

presentation source in association with the first virtual file" (See Plourde: Page 11,

[0089] where succeeding clusters for temporarily buffered media content instance files

are streamed and stored in time shift buffer space); and

"temporarily storing additional data from the second data stream in place of at least a

portion of the second data stored in association with the first virtual file if the container

file size is within the predetermined range of the identified maximum buffer size" (See

Plourde: Page 11, [0090] where the media content stored in the clusters of time shift

buffer is overwritten and deleted, note buffering algorithms are applied when

subsequent incoming data stream size is greater than that of free space).

As per claims 4 and 16, the combined teaching of the Korst and Plourde references

further teaches "rendering one of the first and second data streams in real-time

contemporaneous with the storing of at least one of the first and second data streams"

(See Plourde: Page 5, [0052] and Page 10, [0085] wherein real-time operating system

environment multiple simultaneous data transfer operations for moving media content

from cache to storage, and receiving new content and storing in cache are effectively

orchestrated).

As per claims 5 and 17 the combined teaching of the Korst and Plourde references further teaches the following:

"temporarily storing data associated with a third data stream of a second presentation source in association with a second virtual file" (See Plourde: Page 11, [0089] where succeeding clusters for temporarily buffered media content instance files are streamed and stored in time shift buffer space); and

"temporarily storing additional data from the third data stream in place of at least a portion of the data stored in association with the second virtual file if the container file size is within the predetermined range of the identified maximum buffer size" (See Plourde: Page 11, [0090] where the media content stored in the clusters of time shift buffer is overwritten and deleted, note buffering algorithms are applied when subsequent incoming data stream size is greater than that of free space).

As per claims 6 and 18, the combined teaching of the Korst and Plourde references further teaches "the maximum buffer size is proportional to an amount of time indicated via a user interface" (See Plourde: Page 12, [0097] where capacity of time shift buffer is assumed and estimated based on duration of media content instance time, for example 3-4 hours).

As per claims 7 and 19, the combined teaching of the Korst and Plourde references further teaches "the maximum buffer size is dynamically increased during the storing of data from the first data stream" (See Plourde: Page 12, [0097] where time shift buffer

size is set and free space is tracked, and Korst: col. 9, lines 35-43 where number of

active streams is increased and block size is adapted).

As per claims 8 and 20, the combined teaching of the Korst and Plourde references

further teaches "the first data and additional data are stored in a native packet format

prior to a decoding process" (See Plourde: Page 6, [0063] where compressed audio and

video streams are produced in accordance with the syntax and semantics of a

designated audio and video coding method).

As per claims 9 and 21 the combined teaching of the Korst and Plourde references

further teaches the following:

"at least a first data block" (See Korst: col. 7, lines 14-15 where blocks of data are read,

including the first one); and

"a file descriptor block containing at least a seek index and a seek index granularity,

wherein the seek index indicates a plurality of equally distributed data blocks within the

corresponding virtual file and the granularity indicates a size for each of the data blocks"

(See Plourde: Fig. 3C, Page 10, [0088] and Page 15, [0110] where FAT file entry

describes information about media content instance files, such as physical locations and

filter is provided to user to seek media content for contemporaneous viewing).

As per claims 10 and 22, the combined teaching of the Korst and Plourde references

further teaches "the additional data is stored in place of the first data beginning with the

first data block and continuing with successive data blocks of the first virtual file" (See

Plourde: Page 11, [0089] where succeeding clusters for temporarily buffered media

content instance files are streamed and stored in time shift buffer space).

As per claims 11 and 23, the combined teaching of the Korst and Plourde references

further teaches "if the container file size is within the predetermined range of the

identified maximum buffer size, the seek index granularity is increased so as to increase

data block size without changing the number of seek index entries" (See Plourde: Page

12, [0097] where time shift buffer size is set and free space is tracked, and Korst: col. 9,

lines 35-43 where number of active streams is increased and block size is adapted).

Allowable Subject Matter

4. Claims 12 and 24 are objected to as being dependent upon a rejected base claim,

but would be allowable if rewritten to overcome the rejections(s) under 35 U.S.C. § 101

and 35 U.S.C. § 112, and in independent form including all of the limitations of the base

claim and any intervening claims.

5. The prior art made of record

   A. U.S. Patent Application 2003/0110504

   B. U.S. Patent No.   6,205,525

The prior art made of record and not relied upon is considered pertinent to applicant's

disclosure.

   C. U.S. Patent Application 2004/0193648

D. U.S. Patent No.   6,449,653

E. U.S. Patent No.   5,933,385

Response to Arguments

6. As to Applicant's Arguments, filed on October 17, 2006, has been fully considered,
please see discussion below:

a. At pages 7-8, concerning claims 1-24, Applicant's argued 35 U.S.C. § 101 rejection
to claims and 35 U.S.C. § 112 rejection to claims 1 and 13 under 35 U.S.C. § 112,
Examiner has withdrawn the rejections as necessitated by claim amendment to claims 1
and 13.

b. At Page 8, concerning claims 1 and 13, Applicant argued that cited Plourde reference
fails to teach a virtual file for each of the one or more source, and another cited Korst
reference doe neither make up the deficiency, nor teaches determining a container file
size.

    As to the above argument, the Examiner respectfully submits that the FAT having
entries describing attributes of content media instance files where directory structured
virtual file contains **one or more entries** and the structure does **teach one directory
having one entry**. As for determining a container file size, the Examiner does
respectfully submit that Korst teaches the limitation by calculating the data block size
and number of active data streams to be read in a cycle. As further detailed in Korst
reference (col. 7, lines 13-42), Korst does teach determining file size by determining

data streams size.

c. At Pages 9-10, concerning claims 2-11 and 14-23, Applicant argued Plourde

reference does not teach features as Office Action said it does, for example, virtual file

for claim 3 and 15.

As to above argument, the Examiner respectfully submits that the teaching of

respective element for each of the claims comes from the combined teaching of the

references, for example, as Applicant does not argue that Korst reference does teach

virtual file to the example.

d. At Pages 10-12, Applicant argued that the Examiner pieced up teachings from

Plourde and Korst references and the combination of the references is an improper

hindsight.

As to the above argument, the Examiner respectfully submits that the motivation or

suggestion of combination of the references does come from the BACKGROUNDS OF

INVENTION of the references and the combination would have Plourde's buffering

mechanisms for video recording and delivery more efficient due to more accurately

calculated and determined buffer size, a teaching provided by Korst reference.

e. At Page 8, concerning allowable subject matter of claims 12 and 24, the Examiner

maintains the same grounds for allowance, however, as an Examiner without a full

signatory authority, the Examiner is required to conduct an update search before

submitting the allowance for review and approval.

Conclusion

7. Applicant's amendment necessitated the new grounds of rejection presented in this Office Action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Contact Information

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kuen S Lu whose telephone number is (571) 272-4114. The examiner can normally be reached on Monday-Friday (8:00 am-5:00 pm). If attempts to reach the examiner by telephone pre unsuccessful, the examiner's Supervisor, John Cottingham can be reached on (571) 272-7079. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for Page 13

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 886-217-9197 (toll-free).

Kuen S. Lu

Patent Examiner, Art Unit 2167

March 16, 2007
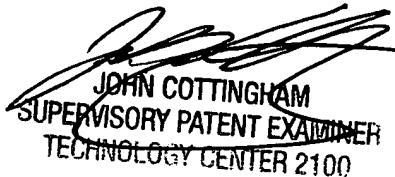
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